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RESEARCH ARTICLE

A Study of Disclosure Extent and Quality in the MD&A Sections of Indian Listed Companies

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Abstract

This study investigates the extent of disclosure in Management Discussion and Analysis (MD&A) reports among Indian companies and evaluates the influence of firm-specific factors thereon. A sample of 55 firms was selected via random sampling without replacement from the BSE-500 Index constituents for the fiscal year 2018-19. Descriptive statistical analysis reveals a mean disclosure level of 64.8%, with the range and standard deviation indicating substantial inter-firm variability. Multinomial logit regression was employed to assess the determinants of disclosure levels. Among seven explanatory variables, firm size, financial leverage and audit firm type exhibit statistically significant positive associations with disclosure extent. Profitability, institutional ownership, board independence (defined as at least 50% independent directors) and firm age, however, demonstrate no significant effects. The findings delineate the prevailing MD&A disclosure practices among prominent BSE-listed entities and advocate enhanced reporting standards within the Indian corporate landscape.

Key Words: *MD&A report; BSE; Disclosure level; Firm-specific factors; Annual reports; India*

1. Introduction

The main purpose of financial reporting is to provide stakeholders with useful information to support their decision-making. However, for over two decades, there has been ongoing debate about the relevance of the current financial reporting model, especially regarding its role in stewardship. This skepticism arises mainly because it primarily delivers historical financial data. Additionally, the nature and structure of businesses have changed drastically. Rapid advances in information technology have driven globalization in capital markets and world trade, which has intensified business competition [1]. These complexities increase stakeholders' need for comprehensive information to make sound economic decisions. Consequently, stakeholders now seek more narrative disclosures, which are considered more relevant for decision-making. This growing demand pressures standard setters and regulators to reconsider and develop a new model of financial reporting. Narrative disclosures present information analytically, greatly aiding the understanding of its implications.

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They play a crucial role in reducing information asymmetry between management and stakeholders [2]. There is broad agreement that the current reporting model should evolve to better meet the changing information needs of external users [3].

The Management Discussion and Analysis (MD&A) report, as a narrative document, holds significant importance in this context. In developed countries, numerous guidelines and strict regulations have been established and enforced to govern it. In India, the regulation of the MD&A report falls under the SEBI (listing obligation and disclosure requirement) regulation, 2015. Given this, it is crucial to identify company-specific factors that influence the extent of disclosure in the MD&A report. A review of relevant literature reveals that there is limited knowledge about the key variables affecting the level of disclosure in MD&A reports within India. Hence, this study aims to explore potential determinants contributing to the variations in MD&A disclosure levels in the Indian context [4].

2. Literature Review

A review of the relevant literature on disclosure practices in Management Discussion and Analysis (MD&A) reports reveals that many studies have explored the extent of disclosure within these reports [5]. However, research focusing on identifying the factors that influence the level of disclosure in MD&A reports remains limited, especially in the international context. In India, there is a noticeable lack of studies examining the determinants of disclosure levels in MD&A reports. Previous researchers from various countries have investigated different influencing factors, including company size, ownership, profitability and industry type, among others [6-9].

The literature shows that researchers typically use two main methods to measure disclosure levels in MD&A reports: content analysis and disclosure index. The study periods vary from one to five years, with most recent research conducted after 2010. The sample sizes also vary widely, with many studies selecting companies through random sampling [9]. In the Indian context, for example, Chakraborty et al. [10] based their study on a sample of 50 companies, as referenced in studies by Vedpuriswar et al. [11].

Researchers have attempted to explain differences in disclosure levels using various firm-specific characteristics. The number and type of characteristics considered vary significantly; for instance, Ginesti et al. [9] focused on two factors—audit firm size and sector type while Ahn et al. [12] evaluated six attributes, including firm performance, external financing, industry competition, firm size, ownership structure, and top management involvement in MD&A disclosures. Despite the importance of MD&A disclosures in decision-making, there has been little comprehensive research on disclosure practices in MD&A reports within the Indian context [13].

3. Research Methodology

For this study, 55 companies were chosen from the top 500 BSE-listed firms based on their total income for the year 2018-19. The sample was drawn using simple random sampling without replacement. To assess the level of disclosure, the disclosure index method was employed, featuring a checklist of 52 information items. To identify the factors significantly affecting a company's MD&A Disclosure Score, a multinomial logit regression model was developed.

4. Extent of Disclosure in MD&A Report

Table 1 presents descriptive statistics of the overall MD&A disclosure scores to analyze the extent of disclosure among the sample companies.

Table 1: *Descriptive statistics of overall MD&A disclosure scores.*

Mean	64.80%
Maximum	90%
Minimum	25%
Range	65%
Standard Deviation	11.12%

Source: *Computed by the researchers.*

Table 1 reveals that the mean disclosure level of our sample companies is 64.8%, suggesting that, on average, the disclosure is insufficient. A considerable variation in the overall disclosure is observed, as reflected by a range of 65% and a standard deviation of 11.12%. To understand the reasons behind this variation, several company-specific attributes have been identified and examined in this study.

5. Determinants Selection and Hypotheses Formulation

Based on previous empirical studies on human resource disclosure, theoretical considerations and data availability, the following company specific attributes have been selected:

- Institutional holdings.
- Firm size.
- Leverage.
- Profitability.
- Representation of independent directors in the board.
- Audit firm size.
- Age of the firm.

5.1. Hypotheses

H_{11}: There is a positive association between institutional ownership and the extent of MD&A disclosure.
H_{21}: There is a positive association between firm size and extent of disclosure in MD&A report.
H_{31}: The extent of disclosure in MD&A report is positively related to the leverage.
H_{41}: There is a positive impact of firm's profitability on the extent of its MD&A disclosure.
H_{51}: The extent of disclosure in MD&A report is greater if fifty percent or more of the directors on their boards is independent than that of the companies with less than fifty percent of such directors on their boards.
H_{61}: The extent of mandatory disclosure in MD&A reports of Indian listed companies is greater for companies audited by big and reputed audit firms than that of the companies which are not audited by such audit firms.
H_{71}: The firm's age has a positive significant impact on the extent of disclosure in MD&A reports of Indian listed companies.

6. Result and Analysis of Multinomial Logit Regression

Since, any form of logit regression can be applied only on datasets with categorical dependent variable, the MDAS (dependent variable) is first categorized into the following three categories to make the data suit the application of multinomial logit regression:

- The category with MDAS<0.90 is assigned the number '0'.
- The category with 0.90 ≥ MDAS<1 is designated '1'.
- The category with MDAS=1 is designated as '2'.

Since, the responses (values of the observations) of our dependent variable have been categorized into three distinct categories, it now suits the application of multinomial logit regression with category '2' taken as the reference category because this category has the no intra-category variation unlike the other two categories.

Hence, with respect to this reference category (category 2), the two nominal logistic regressions for category '0' and category '1' are mathematically expressed as follows:

$$ln\frac{\pi_0}{\pi_2} = \beta_{02} + \beta_{02\,TA}X_{TA} + \beta_{02\,IH}X_{IH} + \beta_{02\,ROE}X_{ROE} + \beta_{02\,IDB}X_{IDB} + \beta_{02\,LEV}X_{LEV} +$$

$$\beta_{02\,AUD}X_{AUD} + \beta_{02\,AGE}X_{AGE} \quad (1)$$

$$ln\frac{\pi_1}{\pi_2} = \beta_{12} + \beta_{12\,TA}X_{TA} + \beta_{12\,IH}X_{IH} + \beta_{12\,ROE}X_{ROE} + \beta_{12\,IDB}X_{IDB} + \beta_{12\,LEV}X_{LEV} +$$

$$\beta_{12\,AUD}X_{AUD} + \beta_{12\,AGE}X_{AGE} \quad (2)$$

Where,

$\pi 0$= Probability that a randomly selected company will have MDAS<0.90

$\pi 1$= Probability that a randomly selected company will have index 0.90≥MDAS<1

$\pi 2$= Probability that a randomly selected company will have MDAS x=1

$\frac{\pi_0}{\pi_2}$ = Odd in favour of category 0 w.r.t. the reference category

$\frac{\pi_1}{\pi_2}$ = Odd in favour of category 1w.r.t. the reference category

$ln\frac{\pi_0}{\pi_2}$ = log Odd in favour of category 0 w.r.t. the reference category

= logit of category 0 w.r.t category 2

$ln\frac{\pi_1}{\pi_2}$ = log Odd in favour of category 1w.r.t. the reference category

= logit of category 1 w.r.t category 2

As shown in Table 2, the likelihood ratio test indicates that the final model provides a significantly better fit than the intercept-only model, with firm size, leverage, and audit status emerging as significant determinants of MD&A disclosure.

Table 2: *Model fitting information and likelihood ratio tests for MD&A disclosure determinants.*

Model fitting information				
Model	**Model fitting criteria**	**Likelihood ratio tests**		
	-2 Log likelihood	**Chi-square**	**df**	**Sig.**
Intercept only	119.003			
Final	91.028	29.975	18	0.032
Goodness-of-fit: pseudo-R-square				
McFadden	0.739*			
Likelihood ratio tests for overall significance of the proposed determinants for MDAS				
	Model fitting criteria	**Likelihood ratio tests**		
Effect	**-2 Log likelihood**	**Chi-square**	**df**	**Sig.**
Intercept	91.028	0	0	.
IH	91.702	0.673	2	0.714
TA	92.824	17.961	2	0.047
ROE	93.852	2.823	2	0.244
IDB	92.67	1.642	2	0.441
LEV	104.787	13.759	2	0.001
AUD	97.288	6.26	2	0.034
AGE	92.488	1.46	2	0.482

*0.739 value of McFadden R2 confirms the goodness of overall logit regression (McFadden R2 > 0.6 indicates satisfactory goodness of fit).

Interpretation of the 1st regression with category 0 and category 2:

$$ln\frac{\pi_0}{\pi_2} = 1.658 - 0.673\,X_{TA} - 0.578\,X_{LEV} - 0.788X_{AUD}$$

Or, $$\frac{\pi_0}{\pi_2} = e^{1.658}(e^{-0.673\,X_{TA}})(\,e^{-0.578\,X_{LEV}}\,)(e^{-0.788X_{AUD}}\,)$$

Or, $$\frac{\pi_0}{\pi_2} = constant\ (0.510^{X_{TA}})(\,0.561^{X_{LEV}}\,)(0.455^{X_{AUD}}$$

It is observed that TA, LEV and AUD are the significant determinants of MDAS.

As shown in Table 3, the multinomial logit regression results indicate that firm size, leverage, and audit status significantly influence the likelihood of firms falling into different MD&A disclosure categories.

Table 3: *Parameter estimates of multinomial logit regression for MD&A disclosure categories.*

Parameter estimates of multinomial logit regression						
Dependent variable: MDAS (Categorized as '0', '1' and '2')						
Logit	**Independent variables**	**B**	**Std. error**	**Wald**	**Sig.**	**eB**
$ln\frac{\pi_0}{\pi_2}$	Intercept	2	3.216	0.266	0.6	
	IH	-0	0.055	0.586	0.4	1
	TA	-0.673*	0.203	0.711	0	0.5
	ROE	-0	0.012	0.668	0.4	1
	IDB	-0	1.045	0.057	0.8	0.8
	LEV	-0.578*	0.874	0.438	0	0.6
	AUD	-0.788*	0.901	0.764	0	0.5
	AGE	-0	0.016	0.014	0.9	1
$ln\frac{\pi_1}{\pi_2}$	Intercept	2	3.38	4.437	0.5	
	IH	-0	0.053	0.047	0.8	1
	TA	-0.701*	0.175	7.822	0	0.5
	ROE	-0	0.039	1.635	0.2	1
	IDB	-1	1.078	1.311	0.3	0.3
	LEV	-2.053*	0.906	5.137	0	0.1
	AUD	-2.444*	1.088	5.042	0	0.1
	AGE	-0	0.019	1.168	0.3	1

The reference category is Category 2.

Source: *Researcher's own calculation.*

7. Conclusion

The multinomial logit regression analysis revealed that, among the seven chosen explanatory variables, three are statistically significant. These significant variables—company size, financial leverage, and audit firm size have a positive and notable impact on the level of disclosure in MD&A reports of manufacturing companies listed on the Bombay stock exchange. Conversely, the other variables—profitability, institutional holdings, presence of fifty percent or more independent directors on the company's board and company age were found to be statistically insignificant, indicating they do not significantly influence the extent of disclosure in MD&A reports in India.

References

1. Beattie V, Pratt K. Voluntary annual report disclosure: what the users want. Institute of Chartered Accountants of Scotland. 2002.

2. Tauringana V, Mangena M. Complementary narrative commentaries of statutory accounts in annual reports of UK listed companies. J Appl Account Res. 2006;8:71-109.

3. Beattie V, McInnes B, Fearnley S. A methodology for analysing and evaluating narratives in annual reports: a comprehensive descriptive profile and metrics for disclosure quality attributes. Account Forum. 2004;28:205-36.

4. Atmadja N, Tarca A. Australian managers review of operations: what do they disclose? University of Western Australia, Sydney, Australia. 2004.

5. Pisano S, Alvino F. New European union's requirements and IFRS practice statement "Management Commentary": does MD&A disclosure quality affect analysts' forecasts? J Mod Account Audit. 2015;11:283-301.

6. Ginesti G, Macchioni R, Sannino G, et al. Firms' disclosure compliance with IASB's management commentary framework: an empirical investigation. MPRA. 2013.

7. Arshad R, Nor RM, Noruddin NAA. Ownership structure and interaction effects of firm performance on management commentary disclosures. J Glob Manag. 2011;2:124-45.

8. Hui-yun L, Lin Z. A research on the correlation between MD&A disclosure and financial performance. 21st International Conference on Management Science and Engineering, Finland. 2014.

9. Ginesti G, Macchioni R, Sannino G, et al. The impact of International Accounting Standards Board (IASB)'s guidelines for preparing Management Commentary (MC): evidence from Italian listed firms. J Mod Account Audit. 2013;9:305-20.

10. Chakraborty R. Narratives in management discussion and analysis: a study of corporate practices in India. Int J Adv Innov Res. 2019;6:88-100.

11. Vedpuriswar AV, Subramanian S, Kaul V. Coming up short on disclosures. Indian Manag. 2004;43:60-6.

12. Ahn TS, Lee J. Determinants of voluntary disclosures in Management Disclosure and Analysis (MD&A): Korean evidence. Korean Acc Rev. 2005;30:33-78.

13. Uddin MA, Safiuddin M. Narrative reporting disclosures: a study of selected companies listed in Dhaka Stock Exchange (DSE). Cost Mgmt. 2015;43:41-50.